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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,962	07/03/2001	Marco Stura	IT20000012	9935
173 7590 08/15/2007 WHIRLPOOL PATENTS COMPANY - MD 0750 500 RENAISSANCE DRIVE - SUITE 102 ST. JOSEPH, MI 49085			EXAMINER MAH, CHUCK Y	
			ART UNIT 3677	PAPER NUMBER
			MAIL DATE 08/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
09898962	7/3/01	STURA ET AL.	IT20000012

WHIRLPOOL PATENTS COMPANY - MD 0750
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EXAMINER

Chuck Mah

ART UNIT	PAPER
3677	20070722

DATE MAILED:

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Commissioner for Patents

\\Chuck Y. Mah\
Primary Examiner
Art Unit: 3677



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

MAILED

Application Number: 09/898,962
Filing Date: July 03, 2001
Appellant(s): STURA ET AL.

AUG 15 2007

GROUP 3600

Mark A. Davis (#37,118)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 16, 2007 appealing from the Office
action mailed August 18, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

3,089,202	Pulaski	May 14, 1963
3,103,398	Phelps	Sept. 10, 1963
2,778,000	Mills	Jan. 15, 1957
3,955,044	Hoffman et al.	May 4, 1976

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-17, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pulaski (3,089,202) in view of Phelps (3,103,398).

'202 discloses the invention as claimed but for the conductive hinge plates. '398 teaches a hinge having conductive plates for conducting electricity in order to

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eliminate wear and deterioration of conductor wires during repeated movement of the doors. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the hinge of '398 with the refrigerator of '202 such that no wire would be inserted through the electrical hinge, so that wear and deterioration by repeated flexing of conductor wire can be avoided.

Claims 18-20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pulaski '202 and Phelps '398 as applied to claims above, and further in view of Mills (2,778,000).

'202 and '398 do not show insulating members insulating the fasteners and the hinge plates from the door and cabinet. Mills '000 teaches bushing members (32, 37) and insulating members (13, 14, see "INSULATION" labeled in figure 1) insulating the conductive hinge parts from the door and cabinet. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hinge of '202 and '398 with insulating members as taught by '000 to isolate the conductive hinge parts from the door and the cabinet to prevent a short circuit and dissipation of electricity.

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pulaski '202 and Phelps '398 as applied to claims above, and further in view of Hoffman et al. (3,955,044).

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'202 and '398 do not show a conductive reinforcement element coupled the wire to the fasteners. '044 teaches a reinforcement element (14) to connect a wire to a fastener to provide protection from harsh environments by eliminating electrolytic corrosion. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wire of '202 and '398 with an reinforcement element connected to the wire as taught by '044 to eliminating electrolytic corrosion.

As to claim 23, the examiner takes Official Notice that using an insulating member to isolate conductive parts of a conductive hinge from the door and cabinet is known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form an insulating member between the conductive reinforcement member and the door or cabinet to prevent a short circuit and dissipation of electricity.

(10) Response to Argument

Claims 14-17, 24 and 26

Regarding appellant's argument on page 8 (section a) of the brief that Pulaski teaches away from the combination with Phelps, because first, the motivation of Pulaski is to "provide a limited or twisting action of the conductors after the introduction and solidification of the foam insulation" and "Pulaski thus teaches providing a controlled twisting and flexing of the conductor wires". And, second, Phelps specifically teaches

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that no wires are inserted through the hinge, and are thereby "protected against wear or damage". Therefore appellant concludes that the prior art references cannot be reconciled with one another. By closely considering the fair and full teaching of the applied references, the examiner respectively disagrees with appellant. First, the wires of Pulaski are "twisting and flexing", despite whether the twisting and flexing is "controlled twisting and flexing" or "the degree of twisting and flexing is determined by the length of thimble". The fact that the wires being molded in the solidified foam insulation has no effect to the twisting and flexing of the wires and therefore cannot protect the wires from flexing or twisting. Second, Phelps teaches **not only** the wire being "protected against wear or damage", as pointed out by applicant without fully appreciating the reference as a whole. Phelps also provides the most important solution to solve the existing problem of which the rejection is based upon—"Even though only a relative short amount of slack wire may be necessary to enable swinging the doors into fully opened position, it appears that repeated movement of the doors subjects the wire to wear and deterioration by flexing and that in time the wire's usefulness to clearly transmit electrical impulses is impaired" (col. 1, lines 47-59). By carefully considering the applied references, one of ordinary skill in the art would recognize the problem raised by twisting and flexing in Pulaski and the solution solving the problem by Phelps. Therefore, as stated in the rejection "It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the hinge of '398 with the refrigerator of '202 such that no wire would be inserted through the electrical hinge, so that wear and deterioration by repeated flexing

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of conductor wire can be avoided". And, the combination of Pulaski and Phelps is proper.

As to appellant's argument on pages 8-9 (section **b**) of the brief, appellant argues that the combination of Pulaski and Phelps would change the operating principle of Pulaski by comparing each of the references individually and stating a mere statement that "replace the wired hinge of Pulaski with the wireless hinge of Phelps would destroy the wired principle of Pulaski and moreover would not just require a substantial reconstruction of the elements shown in Pulaski, but it would required a complete reconstruction of the hinge taught by Pulaski". The examiner agrees that the operating principle of "a sheet metal reinforcing member" is not the same as that of "the resilient spring fingers", as recognized in (*In re Ratti*, 270 F.2d 810 (CCPA 1959)). However, the instant case is not analogous to *In re Ratti*. The hinge of Pulaski and the hinge of Phelps have the same operating principle as a hinge for hinge a cabinet door to a cabinet body, except that one with the conductor wire "twisting and flexing" and the other solving the particular problem created by "twisting and flexing". The combination of Pulaski and Phelps not only keeps the operating principle as a hinge, but also improves the operating principle. Appellant's argument based upon *In re Ratti* is simply unsupported.

As to appellant's argument on pages 9-10 (section **2**) of the brief, appellant argues that the combination lacks the express element of claim 14. This is simply untrue. Phelps

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clearly teaches first and second plates (36, 37), first and second conductors (26, 62 or 27, 61), the first and second conductors electrically coupled to the first and second hinge plates respectively. It is clear that the combination has all the elements and all these elements are also functionally and structurally equivalent to the invention as claimed in claim 14.

Claims 18-20 and 25

Regarding appellant's argument on pages 11-12 (section 1 of B), appellant's allegation that there is not motivation to combine Pulaski and Phelps will not be further discussed since the issue has been addressed in the previous arguments. The only argument needed to be addressed is whether the combination with Mills is obvious. As one can see from primary reference Pulaski, the outer panel (3) is of sheet metal. Attachment of a fastener of Pulaski-Phelps combination to the door or cabinet of Pulaski would certainly create contact between the fastener and the outer panel and it would be certain that the conductors would raise the issue of short circuit and dissipation of electricity. Mills simply solves the problem by providing an "insulating block" to insulate the fastener from contacting its surroundings. Appellant's argument emphasizing the insulation of "leaves" and "pin", while ignoring the "fastener" is simply unfair to the full teaching of prior art references. The rejection is directed to the "fastener", not the insulating of the hinge leaves or pin. The motivation of "insulating block" is self-evident and therefore the combination with Mills is proper.

As to appellant's argument on page 11 (section 2 of B), the argument is based upon the argument of claim 14. Claim 14 has been addressed in the previous argument. There is not need to reiterate.

Claims 21-23

Regarding appellant's argument on page 13 (section 1 of C) of the brief, again, appellant's allegation that there is not motivation to combine Pulaski and Phelps will not be further discussed since the issue has been addressed in the previous arguments. The only argument needed to be addressed is whether Hoffman has a motivation to combine with Pulaski and Phelps. By careful reviewing of Hoffman, it is clear that the reference not only recognizes the problem of "Electrolytic or galvanic corrosion" of the conductor terminal without the reinforcing element but also provides the motivation to solve this particular problem by reinforcing the conductor terminal with an reinforcing element for "removing electrolytic corrosion" (col. 1, lines 52-64). Appellant's allegation that Hoffman provides no motivation is simply untrue.

As to the argument stated on page 14 (section a) of the brief, appellant argues that Hoffman is non-analogous art. However, it has been held that the determination that a reference is from a non-analogous art is twofold. First, we decide if the reference is within the field of the inventor's endeavour. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the invention was involved. *In re wood*, 202 USPQ 171, 174. In this case, as it can be seen from

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Pulaski and Phelps and Hoffman, the conductor terminals are all within the field of the inventor's endeavour. Further, Hoffman teaches a conductor terminal with a reinforcement to connect the terminal to a fastener to solve the particular problem of corrosion. It is clear that Appellant's allegation that Hoffman is non-analogous art is simply unfounded.

As to the argument on page 15 (section **b**) of the brief, the rejection is not based on "a generalized statement" as alleged by appellant since the rejection clearly recites the motivation taught by Hoffman (see col. 1, lines 52-64 of Hoffman). Further, appellant argues there is not need to eliminate electrolytic corrosion by utilizing a feature form Hoffman. However, there is no evidence to support appellant's assertion and why the argument exists. Motivation taught by Hoffman is clear and sound. The combination of Hoffman with the conductor terminal of Pulaski and Phelps is proper.

As to the argument on page 15 (section **2**) of the brief, appellant's argument is based on the alleged impropriety of the rejection of independent claim 14 and therefore the dependent claims should be patentable. Claim 14 has been addressed in the previous argument. There is not need to reiterate.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

\Chuck Y. Mah\


Primary Examiner

AU 3677

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